

Serial No. 09/998,220  
Response Under 37 C.F.R. § 1.111  
October 1, 2007

## REMARKS

The present application includes pending claims 21-26, 28 and 29. Claims 21-26 stand rejected. Claim 29 has been allowed, while claim 28 is objected to as being dependent upon a rejected base claim.

Claims 21-23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent no. 6,411,287 (“Scharff”). Claims 24-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Scharff in view of United States Patent No. 6,492,978 (“Selig”). The Applicants respectfully traverse these rejections for at least the reasons previously discussed during prosecution and the following:

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure (MPEP) states the following:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must **both be found in the prior art, and not based on applicant's disclosure**.

Manual of Patent Examining Procedure MPEP at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

*See* Manual of Patent Examining Procedure MPEP at § 2142.

Claim 21 recites, in part, “an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface,” of an acoustic wave switch “such that in

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response to a force acting on the dome, the dome deforms and contacts the absorbing material and the absorbing material contacts the touch sensitive surface of the acoustic wave switch with sufficient pressure to actuate the acoustic wave switch.” Claim 24 recites, in part, an “acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch.”

Scharff relates “to a sealing system for use with acoustic wave touchscreens.” *See* Scharff at column 1, lines 5-7. In particular, Scharff discloses various methods of securing a seal over a touchscreen. Scharff does not describe, teach or suggest, however, “an acoustic wave absorbing material disposed between” a seal and a touch screen. Further, Scharff does not describe, teach or suggest an “acoustic wave absorbing material being spaced from” a touch screen and which “contact[s]” the touch screen “in response to a force acting on [an] actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch.”

While Scharff discloses stretched seals over touch screens, Scharff clearly does not describe, teach or suggest an acoustic wave absorbing material” **between the touch screen and the seal**, in which the acoustic wave absorbing material is configured to contact the touch screen when an actuation force is applied. Indeed, Scharff specifically teaches away from such an intervening acoustic wave absorbing material, as shown below.

It is understood that even if the components of the acoustic touchscreen system, e.g., transducers, reflective arrays, etc., are mounted directly to display surface 210 in a configuration similar to that show in FIG. 2 (commonly referred to as a direct-on-tube acoustic touchscreen system), the **acoustic absorption of the sealing member must still be minimized**.

**Although the acoustic absorption of the sealing member must be minimized**, as noted in the example configuration

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shown in FIG. 5, often this design goal is in direct conflict with the goal of maximizing sealing performance.

*Id.* at column 5, lines 44-56 (emphasis added). Scharff is clear – the acoustic absorption of the sealing member **must** be minimized. As such, Scharff specifically teaches away from positioning an acoustic wave absorbing material between the seal and the touchscreen. Scharff simply does not describe, show, teach or suggest any example in which such a material is positioned between the seal and the touchscreen, and certainly does not describe a separate and distinct acoustic wave absorbing material under a seal, in which the material is configured to contact the touch surface.

The Office Action appears to cite Scharff at column 4, lines 1-4 and reference numeral 703 as disclosing an acoustic wave absorbing material disposed between a deformable dome and a touch sensitive surface. *See* September 14, 2007 Office Action at page 2. However, the cited portion of Scharff states the following:

Touchscreen 100 includes a surface 101 suitable for propagating surface acoustic waves, e.g., Rayleigh waves, Love waves, and other waves sensitive to a touch on the surface.

*Id.* at column 4, lines 1-4. Further, reference numeral 703 relates to “tension straps” that are “coupled to the CRT.” *See id.* at column 6, lines 30-31. Neither of these portions, which the Office Action relies on, describes, teaches or suggests, however, “an acoustic wave absorbing material disposed between the deformable dome and the touch sensitive surface,” as recited in claim 21, or an “acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch,” as recited in claim 24.

Additionally, the Office Action responds to the Applicants as follows:

Scharff et al. discloses the acoustic absorption of the sealing member even be minimized, but he still does teach that the

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acoustic absorption material disposed between the seal and touch surface (see col. 6, 61-65).

*See* September 14, 2007 Office Action at page 6. As shown above, the Office Action relies on Scharff at column 6, lines 61-65. This portion of Scharff states, however, the following:

Third, an extremely small and uniform **gap** can be maintained between the seal housing and the touch surface, e.g., less than 1 millimeter, thus allowing the designer to select from a wider range of sealing materials that still meet the acoustic signal absorption requirements of the system.

*See* Scharff at column 6, lines 61-65 (emphasis added). As shown above, this portion of Scharff notes that the “gap” may be small and uniform. Because of this, the “seal housing” may be selected from a wider range of materials. While Scharff discloses a “seal housing” and a touch surface separated by a gap, Scharff does not describe that there is anything disposed between those two components. In short, neither the cited portions of Scharff relied on in the Office Action, nor anything else in Scharff describes an “acoustic wave absorbing material” within the gap between the seal housing and the touch surface. Again, there is nothing in Scharff that describes, teaches or suggests “an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface,” as recited in claim 21, or an “acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch,” as recited in claim 24. Thus, the Applicants respectfully request that the claim rejections be reconsidered and withdrawn.

Scharff does not describe, teach or suggest “an acoustic wave absorbing material **disposed between** the deformable dome and the touch sensitive surface,” of an acoustic wave switch “such that in response to a force acting on the dome, the dome deforms and contacts the absorbing material and the absorbing material contacts the touch sensitive surface of the acoustic wave switch with sufficient pressure to actuate the acoustic wave

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switch," as recited in claim 21. Thus, the Applicants respectfully submit that claims 21-23 should be in condition for allowance.

Additionally, the proposed combination of Scharff and Selig does not describe, teach or suggest an "acoustic wave absorbing material being spaced from the touch sensitive surface of the acoustic wave switch when the actuator is in an unactuated position and the acoustic wave absorbing material contacting the touch sensitive surface of the switch actuating the acoustic wave switch in response to a force acting on the actuator to move the acoustic wave absorbing material into actuating contact with the touch sensitive surface of the acoustic wave switch," as recited in claim 24. Thus, claims 21-26 and 28 should be in condition for allowance.

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, the Applicants will not address such statements at the present time. However, the Applicants expressly reserve the right to challenge such statements in the future should the need arise (*e.g.*, if such statement should become relevant by appearing in a rejection of any current or future claim).

The Applicants respectfully submit that the pending claims of the present application define patentable subject matter, and request reconsideration of the objections and rejections. If the Examiner has any questions or the Applicants can be of any assistance, the Examiner is invited to contact the undersigned attorney for the Applicants.

No fee is believed due with respect to this Paper. The Commissioner is authorized, however, to charge any necessary fees, or credit any overpayment to Account No. 13-0017.

Dated: October 1, 2007  
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